

IN THE CLAIMS

This listing of claims replaces all prior versions, and listings, in this application.

Claims 1-21 (canceled)

22. (currently amended) A process for preparing a cancer cell-transplanted non-human animal comprising:

- (a) preparing a cell culture support coated on a surface, wherein the cell culture support is comprised of a polymer which shifts from a dehydrated state to a hydrated state in the temperature range of 0-80°C but the cell culture support is not a mixture of a polymer and collagen, wherein the polymer is obtained by polymerization of one or more monomers selected from the group consisting of (meth)acrylamide compounds, N- (or N,N-di)alkyl-substituted (meth)acrylamide derivatives, and vinyl ether derivatives;
- (b) cultivating cancer cells on the cell culture support at a temperature at which the polymer is dehydrated;
- (c) cooling the cell culture support to a temperature at which the polymer is hydrated, whereby a sheet of cancer cells is detached from the cell culture support without being treated with a proteolytic enzyme or ethylene glycol bis(2-aminoethylether) tetraacetic acid (EGTA); and
- (d) transplanting the sheet of cancer cells to a specified site of a non-human animal.

23. (previously presented) The process for preparing a cancer cell-transplanted non-human animal according to claim 22, wherein the cell culture support consists of a homo- and/or co-polymer of the one or more monomers.

24. (previously presented) The process for preparing a cancer cell-transplanted non-human animal according to claim 22, wherein the polymer is poly(N-isopropylacrylamide).

25. (withdrawn) A cancer cell-transplanted non-human animal prepared by the process

according to claim 22.

26. (previously presented) A method of selecting an anti-tumor agent comprising: administering a test substance to a cancer cell-transplanted non-human animal prepared according to claim 22 and selecting a test substance that reduces volume and/or weight of a tumor formed from the sheet of cancer cells.

27. (new) A process for preparing a cancer cell-transplanted non-human animal comprising the steps of preparing a cell culture support coated on a surface with a polymer the hydration force of which changes in a temperature range of 0-80 °C, wherein the cell culture support is not a mixture of a polymer and collagen, then cultivating cancer cells on the support in a temperature region where the polymer has weak hydration force, thereafter adjusting the culture solution to a temperature at which the polymer has a stronger hydration force, whereby the cultured cancer cells are detached from the cell culture support without being treated with a proteolytic enzyme or ethylene glycol bis(2-aminoethylether) tetraacetic acid (EGTA), and transplanting the detached cancer cells to a specified site of a non-human animal on which transplantation is to be performed.

28. (new) The process for preparing a cancer cell-transplanted non-human animal according to claim 27, wherein the detached cancer cells are in a sheet form.

29. (new) The process for preparing a cancer cell-transplanted non-human animal according to claim 28, wherein the cancer cells sheet to be transplanted is prepared in a specified shape of a specified size so that the size and/or shape of the cancer tissue in the non-human animal is controlled.

30. (new) The process for preparing a cancer cell-transplanted non-human animal according to claim 27, wherein a carrier is placed in contact over the cultured cells at the end of cultivation and the cells are detached intact together with the carrier.

31. (new) The process for preparing a cancer cell-transplanted non-human animal according to claim 27, wherein the cancer cells are of a transplantable cell line.

32. (new) The process for preparing a cancer cell-transplanted non-human animal according to claim 31, wherein the transplantable cell line is selected from the group consisting of HBC-4, BSY-1, HBC-5, MCF-5, MCF-7, MDA-MB-231, U251, SF-268, SF-295, SF-539, SNB-75, SNB-78, HCC2998, KM-12, HT-29, WiDr, HCT-15, HCT-116, NCI-H23, NCI-H226, NIC-H522, NCI-H460, A549, DMS273, DMS114, LOX-IMVI, OVCAR-3, OVCAR-4, OVCAR-5, OVCAR-8, SK-OV-3, RXF-631L, ACHN, St-4, MKN1, MKN7, MKN28, MKN45, and MKN74.

33. (new) The process for preparing a cancer cell-transplanted non-human animal according to claim 27, wherein the cancer cells of an untransplantable cell line.

34. (new) The process for preparing a cancer cell-transplanted non-human animal according to claim 33, wherein the untransplantable cell line is selected from the group consisting of MGT-40, MGT-90, CS-C9, and CS-C20.

35. (new) The process for preparing a cancer cell-transplanted non-human animal according to claim 27, wherein the cancer cells are collected from a living tissue.

36. (new) The process for preparing a cancer cell-transplanted non-human animal according to claim 27, wherein no more than 8×10^5 cells are transplanted.

37. (new) The process for preparing a cancer cell-transplanted non-human animal according to claim 27, wherein the cancer cells are derived from human being.

38. (new) The process for preparing a cancer cell-transplanted non-human animal according to claim 27, wherein the polymer the hydration force of which changes in a temperature range of 0-80°C is poly(N-isopropylacrylamide).

39. (new) The process for preparing a cancer cell-transplanted non-human animal according to claim 27, wherein the model animal for carcinogenesis is a nude mouse, a rat, a mouse, a guinea pig, or a rabbit.

40. (new) A cancer cell-transplanted non-human animal prepared by the process according to claim 27.

41. (new) A method of selecting an anti-tumor agent comprising administering a test substance to an animal before and/or after transplanting cancer cells during preparation of a cancer cell-transplanted non-human animal by the process according to claim 27 and evaluating the effect of the administered test substance on tumor formation.